**LISTING OF THE CLAIMS:** No amendments are made herein.

1.  (ORIGINAL)  A method of switching heads in a hard disk drive, the method comprising:

calculating deviations between a reference head and each of the heads;

generating a mapping table, elements of which are deviations between the reference head and each of the heads, and storing the mapping table in a memory;

switching a head in operation to a head associated with a track or sector requested to be accessed;

applying a deviation of the switched head, which is recorded in the mapping table, to the virtual track or the sector address of the track or the sector on which the switched head is positioned, to obtain the physical track or the sector address of the track on which the switched head is positioned; and

accessing the track or the sector to be accessed based on the obtained physical track or sector address.

2.  (ORIGINAL)  The method according to claim 1, wherein the reference head is the head having a physical address whose absolute value is the least among read physical addresses of tracks or sectors on which the heads of a head assembly are positioned.

3.  (ORIGINAL)  The method according to claim 2, further comprising subtracting a physical address deviation of the reference head from each of the physical address deviations of the heads in order to make the physical address deviation of the reference head substantially zero.

4.  (ORIGINAL)  The method according to claim 1, further comprising defining an available data zone.

5.  (ORIGINAL)  The method according to claim 4, wherein the available data zone ranges from the first track from the outer boundary of a disk accessed by the reference head to the last track at the inner boundary of a disk accessed by a head having the greatest physical address deviation.

6.  (ORIGINAL)  A computer-readable medium encoded with processing instructions implementing a method of switching heads in a hard disk drive, the method comprising:

calculating deviations between a reference head and each of the heads;

generating a mapping table, elements of which are deviations between the reference head and each of the heads, and storing the mapping table in a memory;

switching a head in operation to a head associated with a track or a sector requested to be accessed;

applying a deviation of the switched head, which is recorded in the mapping table, to the virtual track or sector address of the track or sector on which the switched head is positioned, to obtain the physical track or sector address of the track or sector on which the switched head is positioned; and

accessing the track or sector to be accessed based on the obtained physical track or sector address.

7.      (ORIGINAL)  The computer-readable medium according to claim 6, wherein the reference head is the head having a physical address whose absolute value is the least among read physical addresses of tracks or sectors on which the heads of a head assembly are positioned.

8.      (ORIGINAL)  The computer-readable medium according to claim 7, the method further comprising subtracting a physical address deviation of the reference head from each of the physical address deviations of the heads in order to make the physical address deviation of the reference head substantially zero.

9.      (ORIGINAL)  The computer-readable medium according to claim 6, the method further comprising defining an available data zone.

10.     (ORIGINAL)  The computer-readable medium according to claim 9, wherein the available data zone ranges from the first track from the outer boundary of a disk accessed by the reference head to the last track at the inner boundary of a disk accessed by a head having the greatest physical address deviation.

11.     (ORIGINAL)  A method of switching heads in a hard disc drive, comprising:

positioning heads at arbitrary locations;

obtaining physical track addresses of tracks accessed by the heads;

designating one of the heads as a reference head to be used for address mapping;

generating and storing a mapping table having the physical track addresses accessed by

the heads;

setting the deviation of the reference head as a zero value;

obtaining track address deviations of the heads with respect to the reference head and recording the deviations in the mapping table;

switching one of the heads that is in operation to a head associated with a track to accessed;

applying the track address deviation of the switched head stored in the memory to a virtual track address of a track on which the switched head is positioned and obtaining the physical track address of the track on which the switched head is positioned; and

accessing the requested track.

12.     (ORIGINAL)   The method according to claim 11, wherein the arbitrary locations are over middle areas of corresponding disk surfaces.

13.     (ORIGINAL)   The method according to claim 11, wherein the reference head is the head having a physical track address whose absolute value is the smallest among the physical track addresses recorded in the mapping table.

14.     (ORIGINAL)   The method according to claim 11, wherein the setting the deviation of the reference head as a zero value is by adding an identical constant to the physical track addresses accessed by the respective, individual heads.

15.     (ORIGINAL)   A method of controlling the head switching of a hard disk drive in a system, comprising:

calculating physical track addresses by referring to a mapping table stored in a memory;

supplying a control signal to read data from, or write data to, a disk;

supplying a control signal to control motion of the head to a track on the disk;

and accessing the disk using calculated physical track addresses.

16.     (ORIGINAL)   The method according to claim 15, wherein calculating physical track addresses includes obtaining the physical track address of the disk on which a head is positioned to access by applying a track address deviation of the disk stored in the memory to a virtual track address of the disk.

17.     (ORIGINAL)   The method according to claim 16, wherein the virtual track

address of the disk is the substantially equal to the virtual track address of a reference disk.

18.     (ORIGINAL)  A system for controlling switching of heads of a hard disk drive, comprising:

a controller coupled to the heads by a read/write channel and a pre-amplifier;

a memory coupled to the controller;

a host interface coupled to the controller and the read/write channel; and

a voice coil motor driver supplying a driving current to the voice coil and coupled to the controller,

wherein the controller accesses a disk on the hard disk drive using physical track addresses read from disks on the hard disk drive and a mapping table stored in the memory.

19.     (ORIGINAL)  The system according to claim 18, wherein when a disk accessing operation is requested, the controller obtains the physical track address of a disk on which a head is positioned to access by applying a track address deviation of the disk stored in the memory to a virtual track address of the disk.

20.     (ORIGINAL)  The system according to claim 18, wherein the controller is a digital signal processor, a microprocessor, or a microcontroller.

21.     (ORIGINAL)  The system according to claim 18, wherein the controller supplies a control signal to the read/write channel to read data from, or write data to, the disk in the disk drive.

22.     (ORIGINAL)  The system according to claim 18, wherein the host interface includes a buffer memory and a control circuit interacting with a computer.